

City of Glenwood Springs, Colorado Long Range Transportation Plan 2003-2030

An Update to the 1999 Long Range Transportation Plan

Prepared for
City Council
And
Transportation Commission

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I. Executive Summary

Many systems comprise Glenwood Springs existing transportation infrastructure such as: neighborhood streets, highways, bridges, trails, sidewalks, crosswalks, an airport, rail lines, and Valley-wide and City-wide buses. They all work together to provide connections within, to and through the City. As described in detail below, some of the transportation system's components are adequate, some are deficient, while some are non-existent. Identifying the strengths and weaknesses of the existing infrastructure will highlight the areas requiring immediate, near-term, and future improvements. This document is an update to the City's first comprehensive transportation plan which will address all forms of transport currently used and/or planned for the area including: pedestrian, bicycle, air, auto, truck, bus and rail.

This document outlines the existing documents that guided the development of the Long Range Transportation Plan. These are the *Comprehensive Plan, 1998*; the *Land Use Plan, 1996*; the *Community Housing Attainability Strategy, 1996*; the *River Management Plan, 1990*; the *Glenwood Springs Long Range Planning Bicycle and Pedestrian Recommendations, 1997*; the *Glenwood Springs Downtown Plan, 1998*; and the *Glenwood Springs Parking Recommendation, 2003*. Each is listed and outlines how it relates to transportation and gives recommendations on transportation planning in Glenwood Springs. These documents are the basis for this plan.

There are several transit agencies in Glenwood Springs and three are listed in this document and how they relate to the overall transportation system in Glenwood Springs. These are the local transit service, Ride Glenwood Springs; the regional transit service, the Roaring Fork Transportation Authority (RFTA); and the Traveler, a demand-responsive transit service for the elderly and disabled provided by Colorado Mountain College. Also outlined are the transportation funding sources available to the City of Glenwood Springs. These are the Transportation Management Tax Fund, the Bus Tax Fund and the RFTA tax.

The existing transportation systems are listed and give a background on where Glenwood Springs overall transportation system is and outlines its strengths and weaknesses. The existing systems are streets and bridges, bicycle and pedestrian, aviation, rail, transit, parking and the transportation demand management program. This update of the Long Range Transportation Plan addresses the strengths and weaknesses and outlines strategies for maintaining and strengthening the transportation system.

To create a long-range plan that can be implemented, the values and vision for Glenwood Springs are stated in Chapter VI. The transportation commission developed the vision for Glenwood Springs and outlined goals and strategies for each of the existing transportation systems in Glenwood Springs. The vision and the goals and strategies are what guide the development of the projects listed at the end of this document.

This Long Range Transportation Plan is to be used as a guide for transportation planning in Glenwood Springs. The projects listed in Chapter IX are to be submitted to the Intermountain Transportation Planning Region where they will be prioritized within the region among other projects from Pitkin, Garfield, Eagle, Lake and Summit Counties. Once prioritized at that level, they will be included in the State 2030 Plan to be released in 2005.

II. Existing Documents

Several existing City documents and plans refer to transportation issues and in some cases form the foundation for this plan and will be highlighted throughout this plan.

a. The Comprehensive Plan, 1998

The City of Glenwood Springs Comprehensive Plan recommends the City "develop a Long Range transportation plan." The foundation for the Comprehensive Plan is its vision statement which reads "The City of Glenwood Springs desires to maintain its small town character and preserve its cultural and natural resources...by implementing a proactive plan...to achieve directed and balanced development, social and economic diversity and address its transportation needs." The Comprehensive Plan describes the City's need to address transportation issues and recommends the following policies: reduce traffic congestion; encourage the efficient use of transportation resources; and encourage equal access to all public facilities by all residents. Additionally, the Comprehensive Plan recommends consideration for several actions: examining the use of the railroad corridor to most effectively accommodate the movement of people and goods through the community; completing the relocation of Highway 82; continue participating in regional transit funding; improving year-round, City-wide transit; completing the river trail system; improving the Grand Avenue Pedestrian Bridge; establishing design standards which encourage pedestrianism; adopting zoning standards which encourage pedestrian-oriented development; and implementing transit-user amenities.

b. The Land Use Plan, 1996

The City of Glenwood Springs Land Use Plan describes more detailed transportation needs such as: the community vision; key vision elements; key planning principles; implementation strategies and urban design principles. These provide the framework for what the Long Range Transportation Plan will comprehensively address.

The Land Use Plan expands on the community goal of addressing transportation needs and describes how a long range transportation plan is a necessary component of comprehensive planning since land-use, economic development and quality of life are interrelated issues. Specifically, it calls for efforts to: "reduce traffic congestion, assure safe and efficient movement of people and goods, and provide equal access to community facilities." These are the same goals as presented in the Comprehensive Plan. It is further stated that these community goals are to be achieved using the principles of vision, scale, participation, equality, needs, balance, and sustainability.

The Land Use Plan description of the "Glenwood Springs Urban Development Area" covers the City's existing municipal boundary and the adjoining areas that can or should provide a full range of municipal activities at the urban level of service. For the Glenwood Springs Urban Development Area the following land use guidelines apply: define the edge of the City; stay within the lines; pay attention to the core (have a Community Center which is connected by year-round transit, provide a balance of parking with alternatives to the automobile, and use downtown as an inter-modal transit hub with bike, bus, rail, and auto connections); encourage development south of Glenwood Park within the Urban Development Boundary; more shade, less pavement (minimize the amount of land which is devoted to pavement to move or park vehicles and preserve open space by linking them with trails); create development standards (a vertical instead of horizontal development model in our core areas in order to reduce sprawl); and establish a "Smart Business Park."

The "Glenwood Springs Planning Area" includes the City's Urban Development Area and adds to it the neighboring rural areas such as Canyon Creek and Spring Valley. For the Glenwood Springs Planning Area the following land use guidelines apply: land use districts; core areas; street classifications; River Trail System; public facilities; and utility extensions. Specifically, land use districts are categorized as either neighborhood, community or regional in nature. For example, neighborhood land uses are primarily residential and contain a variety of residential types and costs and are developed alongside appropriate neighborhood and professional service buildings. Community land uses include a mix of residential with commercial, institutional, hospitality and retail. Regional land uses are vehicle-oriented, commercial and high-density residential uses.

The Land Use Plan designates Core Areas within the urban Development Area. These Core Areas are located at key intersections in the arterial road system and are prime development sites which necessitate redevelopment in order to reach their potential. Four Core Areas have been identified in Glenwood Springs: 1) West Glenwood between Donegan Road and the ColoradoRiver; 2) the Original Town Site (OTS), including the Two Rivers Park/Community Center Area; 3) the South Glenwood Bridge Area; 4) and a southern commercial area adjacent to South Glen Avenue on the east from 23rd Street to the Roaring Fork Marketplace and on the west from 23rd to 29th Street. These area should be the focus of high-density residential and mixed use redevelopment with the first, third and fourth being regional in nature and the OTS being community in nature.

c. Community Housing Attainability Strategy, 1996

The Housing Strategy states that one of the most important criteria in measuring small town character is the opportunity for households to live, work, play and raise families within the

community. Glenwood Springs' role as a regional retail, service and hospitality center has resulted in twice the number of jobs in the community as there are local workers to fill them. As a result, many people who work and serve in Glenwood Springs cannot afford to buy a home near where they spend most of their time, forcing long commutes, less time devoted to families and community, more stress in day-to-day living and, ultimately, more demand for intervention by outside agencies such as child and health care providers, school, public safety and emergency services. It is this dislocation between where people work and where they must live which is the root cause of most of the visible problems of Glenwood Springs. The current imbalance of jobs and housing causes the traffic congestion in Glenwood Springs because people drive so many miles (vehicle miles traveled, VMT) many times a day (average daily trips, ADT). If traffic is the most pressing problem of our times, then creating attainable housing for local workers is one of the ways to alleviate the problem.

The Housing Strategy states several goals which relate to transportation planning: create a community in which people can live, work, play and raise a family (examine housing densities in an effort to direct those necessary densities to locations which are close to jobs and transit hubs); assess housing needs on a continuing basis (government assistance to low income persons is called a "subsidy" while assistance to high income persons is called an "incentive"); priorities for new housing (smaller homes on smaller lots balanced by open space, parks and greenways; housing for people who work in the City; new housing near transit centers and near jobs). With limited land available, it may be necessary to allow higher buildings to increase density and to lower housing costs.

d. River Management Plan, 1990

The main component of the River Management Plan is the River Trail system. Most importantly, this plan states that the trail system should connect activity centers such as parks, schools, neighborhoods and shopping and that it needs to be separate from existing or proposed vehicular paths. In addition, the plan has adopted design criteria for the specifics of the trail such as path widths and surface materials.

e. Glenwood Springs Long Range Transportation Planning Bicycle and Pedestrian Recommendations, 1997

This document resulted from a workshop sponsored by the City. It highlights particular locations in the City that need bicycle and pedestrian improvements and describes methods of responding to the needs.

f. Glenwood Springs Downtown Plan, 1998

The Downtown Plan has a Transportation section and it focuses on transportation issues directly related to downtown. The Downtown Plan outlines two major problems with transportation in downtown: 1) traffic congestion and 2) parking. It further discusses solutions to the traffic congestion problems including: 1) the relocation of SH 82 with several route alternatives presented; 2) the Roaring Fork Regional Rail Corridor and how it can be utilized to solve these problems; 3) rail transit centers and the need to use the rail corridor to move people and goods through Glenwood Springs. The Downtown Plan also addresses the parking problems that are incurred because employees utilize the parking spaces and suggests alternatives to help alleviate the congestion.

g. Glenwood Springs Parking Recommendation, 2003

The recommendation can be summed up as a three-part study, which initially quantifies parking shortages and the sources of demand influence within Glenwood Springs' downtown.

The study continues by seeking those particular 'parking-alternatives' that meet the community's needs while mitigating parking shortages, either through transportation alternatives or enhancements to the existing parking. A reoccurring theme throughout alternative discussions is that there could be transit related alternatives that we may not have identified and/or may require further exploration by a transportation specialist as a 'next step' in continued planning development. The third part of the study acknowledges that alternatives cannot alone deal with the sheer magnitude of Glenwood Springs' parking shortage and must be conjoined with new parking to be successful. Prospective locations for new parking are examined and a parking structure as the success of a Public/Private Partnership, that when built will work with the alternatives and present a comprehensive and systematic approach to balancing parking need with resource allocation.

III. Transit Services

a. Roaring Fork Transportation Authority (RFTA)

RFTA is an authority composed of Eagle and Pitkin counties and five municipalities: Glenwood Springs, Carbondale, Snowmass Village, Basalt and Aspen in the Roaring Fork Valley. RFTA owns the valley's railroad corridor whose purchase was aided by CDOT and Colorado State Lottery (GOCO) money. CDOT money was dedicated for the corridor to be used for rail and GOCO money was to contribute to a trail component. The authority is comprehensively planning the right of way's development in the form of a Corridor Investment Study and Comprehensive Plan.

RFTA's Roaring Fork Valley Transit Development Plan addresses the valley's transit needs. RFTA has many plans for valley wide transit improvements that are based on current ridership, traffic, commuting and demographic analysis. The plan recognizes the following: a strong commuting pattern between residential areas in Rifle, Sit and New Castle and employment centers in Glenwood Springs; a need for increased elderly/disabled transportation access to shopping, social services, educational and medical facilities; and a high level of recreational travel through the corridor, particularly to Glenwood Hot Springs and Ski Sunlight. Therefore, RFTA provides transit service to west Garfield county including Rifle, Silt and New Castle and has an agreement with Glenwood Springs to run year-round City-wide Ride Glenwood Springs local transit service.

b. Ride Glenwood Springs

Ride Glenwood Springs has been in operation since the mid-90s. It was first created as a trolley to transport tourists throughout the City. As time progressed, Ride Glenwood Springs became a more advanced bus system and in 1998 City-wide bus service was available to Glenwood Springs residents, merchants and tourists. At that time there was one route which went from the Glenwood Springs Mall to the Roaring Fork Marketplace. Two buses ran from 7:00 am until 9:30 pm. The fares were \$1 per day with unlimited rides. In 1999, the same route was provided with the same fares as 1998. The bus was primarily funded through the Transportation Management Tax Fund, a .25 cent sales tax for every dollar spent, with a portion of that fund going to provide revenue for the bus system.

In 2000, the voters approved a dedicated source of funding through the Bus Tax Fund, a 0.2 cent sales tax on every dollar spent. In addition to receiving its own funding source, fares increased to \$2 per day unlimited rides and \$1 per ride to increase revenues for the bus system. For more information on Ride Glenwood Springs, the *Ride Glenwood Springs Annual Report for 2000* and the *Ride Glenwood Springs Annual Report for 2001-2002* provide details of the current service.

Annual ridership for Ride Glenwood Springs has been fluctuating, a result of inconsistent fares and routing changes since the service has been a year-round, fixed-route service. For example, the City charged \$1 per day in 1998 and spring of 1999. The City then provided free transit in the summer of 1999 and then increased fares above what they were prior to the free summer to \$2 per day. In 2002, one route was changed to service the community center and ridership has not been maximized on this route. The annual ridership for the last five years is presented below in Table 1. More details are provided in the *Ride Glenwood Springs Annual Reports (1998-2002)*.

Table 1 Annual Ridership for Ride Glenwood Springs, 1998-2002

Year	Annual Ridership
1998	103,442 (partial year)
1999	226,013
2000	218,461
2001	202,155
2002	156,423

c. The Traveler

Colorado Mountain College Senior/Disabled Transit (commonly known as the Traveler) promotes health, social integration and independent living among elderly and disabled populations of Garfield County including Glenwood Springs by providing access to needed services. The Traveler provides wheelchair-accessible, door-to-door, demand-responsive, driver-assisted transportation to Garfield County who cannot use public or private transportation because it is unavailable, inaccessible or unaffordable. This program primarily serves the elderly and disabled who are low income and rural residents of Garfield County.

The service area encompasses all of Garfield County from Parachute east, including Parachute, Battlement Mesa, Rifle, Silt, New Castle, Glenwood Springs and Carbondale. The program has a fleet of seven vehicles, six of which are wheelchair lift-equipped. All service is on a first come, first served basis. Scheduled pickups are preferably booked 24 hours in advance by calling the local dispatcher. Suggested contribution for fares is \$1.00 each way in town or \$2.00 between towns each way from the origin location.

IV. Funding Sources

a. ¼ Cent Transportation Management Tax Fund, 1995

The 1995 Transportation Tax will be effective until 2005 and generates approximately \$750,000 a year. Projects identified for funding include: the connection of 8th Street to Midland Avenue, a south Bridge connection to SH 82 and initial EIS studies for the railroad corridor and the relocation of SH 82. In addition to funding specific projects, the Transportation Management Tax Fund provides revenues for the pavement management program and on-going street improvement projects. The pavement management program outlines a long-term schedule for local road maintenance and upgrades.

b. 2/10 Cent Bus Tax Fund, 2000

This Bus Tax is used for the operational and bus replacement funds necessary in providing City-wide, year-round local bus service. This tax generates about \$600,000 a year.

c. 4/10 Cent RFTA Tax, 2000

The voters in Glenwood Springs approved joining the local Regional Transportation Authority, RFTA. RFTA receives 4/10 of a cent for every dollar spent in Glenwood Springs. This generates approximately \$1.2 million a year.

V. Existing Transportation Systems

a. Streets and Bridges

The existing State Highway and City street system in the Glenwood Springs area, including major bridges is shown on Figure 1. The major streets and highways and their functional classification (collector, arterial and interstate highway) are shown in Figure 2. It is necessary to provide an efficient network of streets and bridges that provide safe and convenient access for autos, trucks, bicycles and pedestrians. Streets must be well-maintained and function according to street classifications.

b. Bicycle and Pedestrian

Glenwood Springs is a community of physically active residents and visitors in a setting conducive to pedestrians and bicyclists. The Pedestrian and Bicycle Circulation Plan identifies an overall pedestrian and bicycle circulation system. The on-road bicycle route is shown in Figure 3. It is necessary to provide an efficient network of sidewalks, trails and routes that provide safe and convenient access for bicyclists and pedestrians to travel around town.

c. Aviation

The Glenwood Springs Municipal Airport, a general aviation airport, serves a limited number of private business travelers and recreational users, along with serving the area's emergency medical transport needs. The Garfield County Regional Airport, located 25 miles west of the City, provides similar services along with some freight air service. Commercial air service in the region is provided from the Aspen/Pitkin County Airport and the Eagle County Regional Airport. Intermodal links to the regional airports are important to the efficient use of these facilities by Glenwood Springs' residents and visitors.

d. Rail

The acquisition of the D&RGW right-of-way by the Roaring Fork Transportation Authority, RFTA, opened the way for consideration of commuter rail service to Aspen from the down valley communities, including Glenwood Springs, and considerable effort is being directed toward realizing the objective of Valley Rail. Experience throughout the country shows that commuter rail service typically attracts between 10% and 20% of the commuting population, and that would include commuters who currently ride RFTA buses. RFTA has prepared a Corridor Investment Study (CIS) of the Roaring Fork Valley and a commuter rail option is an option being discussed in an Environmental Assessment of the Roaring Fork Valley.

Amtrak operates passenger rail serving Glenwood Springs. Passengers can travel west to San Fransisco or east to Denver out of Glenwood Springs. Each direction arrives once a day bringing tourists and visitors into Glenwood Springs. The rail-line passing through Glenwood Springs is also used for freight services, carrying coal and other goods to multiple east-west destinations.

e. Transit

Ride Glenwood Springs has been in operation since the mid-90s. It was first created as a trolley to transport tourists throughout the City. As time progressed, Ride Glenwood Springs became a more advanced bus system and in 1998 City-wide bus service was available to

Glenwood Springs residents, merchants and tourists. At that time there was one route which went from the Glenwood Springs Mall to the Roaring Fork Marketplace. Currently, there are two fixed-routes servicing Glenwood Springs 365 days a year. One route travels between the West Glenwood Mall and Cardiff Glen passing the Community Center and the other travels from the Mall to Cardiff on Grand Avenue passing on Hwy 6&24 and providing service to the lodging/amenity district.

f. Parking

Downtown Glenwood Springs has a parking problem. Trying to accommodate businesses, residences, tourist attractions and the people associated with each is an important task for the City of Glenwood Springs. In tackling these parking issues, a Parking Task Force was assembled and the Task Force's primary objectives were to study parking in the downtown core and recommend parking solutions for Glenwood Springs. The Task Force identified three main groups that parking effects most dramatically. These groups are employers/employees working downtown, shoppers/tourists visiting downtown, and residents living in the downtown area. These groups have unique parking concerns that need to be addressed differently. This recommendation took the three groups into consideration and attempted to maximize parking happiness within each.

g. Transportation Demand Management Program

Glenwood Springs instituted a transportation demand management (TDM) program in 2000. This program was established to be complimentary to traditional transportation system management strategies and assist in alleviating traffic congestion within the City. The program was named Transportation, Responsibility and You (TRY) and provides information and assistance to those wanting transportation choices. The TDM program encompasses all of the above transportation systems in an effort to minimize the vehicle trips in Glenwood Springs and thus reducing traffic congestion while providing modal choices.

VI. Values and Vision

a. Values

Glenwood Springs is a unique community located in a beautiful river valley. It is the Garfield County Seat and the commercial center of Garfield County. Glenwood Springs is a destination resort town with many tourist amenities including skiing, rafting, caving, biking and hiking which attract guests year-round. Glenwood Springs has seen significant growth largely for its location and quality of life that is provided in the unique valley setting.

In developing the Long Range Transportation Plan, four questions were asked and answered by the Transportation Commission to progress transportation planning in Glenwood Springs. The four questions, with answers are below:

1. What values about Glenwood Springs commits you to its future?

The belief in the quality of life is the most important value. Maintaining this quality of life and the environment for the citizens is key to a successful future.

2. What is the quality of life that you want to pass on to future generations?

The quality of life to pass on include the sense of a close, safe community, beautiful outdoor experiences, economic vitality and pedestrian friendliness.

3. What regional transportation connections have been important to the social, economic and environmental vitality and visibility of Glenwood Springs?

The integration within the region with respect to employment, housing and commuting. The region should tie together and the transportation planning should be complimentary to the economic vitality and growth in the region.

4. Which regional transportation connections will be important in the future?

It is important to sustain Glenwood Springs as an affordable resort/residential community in the region.

b. Vision

With the above values identified, the Transportation Commission developed a Long Range Transportation Vision that will guide transportation planning and decision-making in the future.

Long Range Transportation Vision Statement:

To create an integrated transportation system that moves people and goods, provides modal choices, preserves the quality of life, promotes economic vitality, and exemplifies the small town environment that is Glenwood Springs.

c. Preserving a Sense of Community and Quality of Life

i. Population

The population growth of Garfield, Eagle, and Pitkin Counties is the measure to base future traffic projections. The 2000 census recorded Garfield County with a population of 43,791, Eagle County with a population of 41,659 and Pitkin County with a population of 14,872. The total population of the region according the 2000 census is approximately 100,000. To follow the prudent estimation techniques of doubling the population by 2020, the total population impacting Glenwood Spring's traffic volumes will be approximately 200,000. This significant population increase must be addressed in the city's efforts in traffic management. Efforts will need to be made to lower the number of cars, specifically single-occupancy-vehicles, that affect the city's transportation system.

The south Glenwood Springs area development is a major issue with respect to future traffic impacts in Glenwood Springs. Currently, the City understands the need for improvements to 4-Mile Road and Midland Avenue and those will need to be additionally addressed in the development plans for areas in south Glenwood Springs. The intersection of 4-Mile Road and Midland Avenue is an active project for 2003. A new intersection will be built and future traffic impact is being taken into account in the project. This intersection is of primary concern for further development in that area of the City and the new intersection will be helpful in reducing traffic congestion and flow for future development.

Many communities in west Garfield County are being developed and have changed the transportation system in Glenwood Springs. The impact on traffic in Glenwood Springs from these areas has been addressed and RFTA, which Glenwood Springs is a member , has been addressing the need of reducing commuting traffic by creating the Grand-Hogback Route, providing bus service between Rifle, Silt, New Castle and Glenwood Springs. In addition to providing bus service to ease commuter congestion, RFTA has installed (or designated) park-n-ride facilities, located in Rifle at the junction of SH13 and Hwy 6&24, at the Silt Coop, and at the Glenwood Springs Mall, to accommodate riders who wish to ride the bus into Glenwood rather than drive. Additionally, RFTA provides a Roaring Fork Valley Route accommodating persons up-valley in Carbondale, El Jebel, Basalt and Aspen who request or require transportation into Glenwood Springs.

ii. Regional Planning

The Intermountain Transportation Planning Region (TPR) is a subsection of the State Transportation Planning Division and consists of five counties: Eagle, Garfield, Lake, Pitkin and Summit. These counties work together to devise transportation systems that would benefit the region. Glenwood Springs, the largest city in Garfield County, is an important hub to the region's transportation issues. RFTA and the Intermountain TPR have prepared the Intermountain Transit Element which presents a summary of the issues that relate to public transit use in the region.

The City participates in meetings with the Intermountain TPR planners to address the issues concerning Glenwood Springs and encourages ongoing communication. Additionally, the City works closely with RFTA to address transit issues within the Roaring Fork Valley and West Garfield County to make public transit a viable option for the residents and tourists in Glenwood Springs.

iii. Land Use

The City has taken into account the importance of mixed-use development. Many plans, including Glenwood Meadows, have encouraged mixed-use development. Residences and commercial buildings will be located near one another promoting a sense of community and encouraging residents to have less dependence on the automobile. Including transportation plans in the developments is necessary and is being done. Recently, Ride Glenwood Springs service was extended to south Glenwood Springs to encourage residents of Cardiff-Glen to use transit as a form of transportation. It is also understood that south Glenwood Springs is expanding and may require more frequency in the buses for it to be a feasible transportation option.

The City is promoting mixed-use development in the new building on the corner of 7th and Grand Ave., under the bridge. The ground floor will be retail, the second floor offices and the top floor residences. This is a positive step in the right direction for promoting mixed-use development.

iv. Housing

Housing in Glenwood Springs is a major influence on traffic and transportation related issues. The City supports the idea of providing housing within the City limit with regards to transportation. Providing housing closer to the City core is a mechanism to decrease traffic congestion because residents are closer to where they work and their children are closer to where they go to school. New developments, such as Glenwood Meadows, are taking into account the relationship between commercial and residential development working together to provide a positive community experience and decrease the amount of miles traveled to get shopping done, hence decreasing traffic congestion.

v. Neighborhoods

Neighborhood safety is an important aspect of life in Glenwood Springs. Speed limits in the City are regulated to promote motorist, pedestrian and bicyclist safety. The Glenwood Springs Police Department enforces the speed limits and provides safety to the residents and visitors of the City. Furthermore, with acceptable speed limits vehicular noise is reduced. There is a noise ordinance in Glenwood Springs where vehicles contribute the most noise due to SH 82 passing directly through. A portion of the daily traffic passing over the Grand Avenue bridge, which is the prominent route where vehicular noise is present, has been diverted to Midland Avenue thus reducing some of the noise in the downtown portion of the City. A significant portion of the vehicular noise comes from heavy truck traffic on SH 82. There are three "noise ordinance enforced" signs posted in the City, however it is difficult to force trucks not to use engine brakes within the City. Efforts are currently underway with THE Colorado Department of transportation (CDOT) to reduce trucks' use of engine brakes within the City. Providing alternate transportation methods and transit use within the City and for individuals who commute to the City reduces the number of motorists on the roads and thus helps reduce vehicular noise.

Speed limits in residential areas are lower and deter traffic traveling through the neighborhoods. Streets that are designated as "one-ways" can also deter motorists from using them as an alternative through residential areas. Speed bumps were installed near the high school to prevent cars from traveling at unsafe speeds and to promote safer neighborhood streets. Currently, the City is monitoring their effectiveness and will use them to decide if more speed bumps in other areas are an effective way to slow down traffic in neighborhoods.

vi. Commuting

A Transportation Demand Management (TDM) program has been created and a program titled *Transportation, Responsibility and You* (TRY) has been formed within the TDM program and is actively working to encourage alternate means of transportation in Glenwood Springs. Several goals have been put in place for the program and can be reviewed in the TRY manual.

In coordination with RFTA, bus service has been extended to West Garfield County addressing the need of reducing commuting traffic by creating the Grand-Hogback Route. This route provides bus service between Rifle, Silt, New Castle and Glenwood Springs. In addition to providing bus service to ease commuter congestion, RFTA has installed (or designated) park-n-ride facilities to accommodate riders who wish to ride the bus into Glenwood rather than drive.

The TRY program in use for the City has conducted a Commuter Traffic Survey to study average vehicle occupancy and the traffic make-up in Glenwood Springs in the fall of 2001 and the spring of 2002 and 2003. The studies were limited to peak hours of traffic (6:30-8:30am and 4:00-6:00pm) and specific intersections serving as south, west and east access points to the City. The goals of the study were to measure the number of vehicles/hour at specific locations and determine what types of vehicles make up the traffic, including single occupancy and multiple occupancy private and commercial vehicles. The results of the study will be used to measure the decrease (increase) in commuter traffic within the City and check the progress of the TDM program. The TDM program is in place to reduce traffic volume within, to and through the City and will need to be monitored through studies, such as the Commuter Traffic Survey, in order to gauge its progress as a successful TDM program.

vii. Traffic

The City has implemented Ride Glenwood Springs, a year-round transit system with two permanent routes, and additional bus routes might be added to increase ridership within the City. The City is working in collaboration with RFTA to provide the bus system and it is monitored on a monthly basis to determine the needs of the community and its success.

In addition to transit, other modes of alternative transportation are being marketed to the City's residents and tourists as one of the goals of the TDM program. The planning department has put together a detailed map of pedestrian trails and paths within the City that indicates what type of walkway (paved/unpaved) it is. The map also shows pedestrian paths that are planned for future use and possibilities that need to be further investigated. The River Trail is also going to be finished and it will provide the entire City with a pedestrian path that is separate from the motorists, providing pedestrian safety. Bicyclists are also encouraged to use the River Trail as a means of passageway off of the busy streets, but it does not go through the entire length of the City, and bicyclists and motorists are forced to share the roadways. The designated bike route (figure 3) discussed earlier aids in bicyclist's safety and encourages bicycling as a form of transportation.

The TDM program was implemented to promote alternative transportation for residents of Glenwood Springs. Brochures outlining the bus schedule are available throughout the City for residents to easily pick up and decide what bus route is best for them. Many promotional programs have been implemented such as Bike To Work and School Week, TRY Another Way Day and Walk To Work Day to introduce and encourage alternative transportation.

viii. Education

Brochures with the bus schedules and fare information are available to the public in many of the local businesses, hotels, and in City Hall. Easy access to these brochures gives the public knowledge that transit is part of our transportation system and a great alternative to driving. In addition, the Police Department educates the public on pedestrian/bicyclist safety with classes and clinics provided during Bike to Work Month. To address the youth of glenwood Springs, the Police Department goes into the classrooms and educates students on bicycling/pedestrian safety. This is an effective measure to ensure that the majority of children know the laws and their parents can feel better about their child's safety.

Bike To Work and School Week, TRY Another Way Day and Walk To Work Day are programs designed to introduce and educate the community on issues concerning alternative transportation. Another education tool in use for the public are the weekly columns in the Post Independent. The column is printed to inform the public about road closures and/or projects that might cause motorist's trouble. It is also intended to promote the TRY program and let residents know they have an alternative to driving their car

VII. Goals and Strategies

The success of the transportation system within a community is dependent on the interaction of many factors. To develop a transportation system that works to preserve our small town character, we must consider all of these issues and develop long-range solutions.

a. Streets and Bridges

Goal

To provide an efficient network of streets and bridges that provide safe and convenient access for autos, trucks, bicycles and pedestrians. Streets must be well-maintained and function according to street classifications.

Strategies

- 1. Use volume to capacity (V/C) ratio analysis as a means of determining traffic congestion, with a level of service appropriate to the street designation.
 - City staff shall increase traffic counting to a level that will provide data for V/C analysis appropriate to street designation.
 - City staff shall establish roadway capacity information.
 - City staff shall monitor changes in volume to capacity.
- 2. Improve all streets on a regular basis for safety, efficiency and bicycle and pedestrian friendliness according to an improvements schedule.
 - The Public Works Department shall establish and implement improvement schedules, incorporating, but not limited to, the following methods:
 - Traffic calming.
 - o Working with CDOT to coordinate traffic signals.
 - o Enhance bike routes, including adding shoulders to roadways.
 - o Providing clear and obvious signage.
 - Periodic review of roadway conditions and strategies for on-going maintenance and prioritizing future capital projects.
 - Improve pedestrian accessibility and safety along 7th Street between Colorado Avenue and the Roaring Fork River.
 - Improve safety and reduce congestion on the Grand Avenue Bridge.
 - Regularly maintain bridges and roadways for safety according to the maintenance schedule.
 - Regularly improve bridges and roadways for safety according to an improvements schedule.
 - Bridges should add to transportation efficiency by providing direct routes throughout the City and with regional connections.

b. Bicycle and Pedestrian

Goal

Provide both urban and recreation walkways and trails that efficiently connect to major points of interest such as shops, parks, schools and employment centers. Work with and support efforts of the Parks and Recreation Commission and the River Commission in developing bicycle and pedestrians facilities.

Strategies

- Provide regularly scheduled maintenance for all trails and walkways.
- Provide safety improvements for all trails and walkways.
- Adopt standards for the design of new trails, bicycle lanes and walkways.

- Provide trails and walkways with access to major points of interest throughout the City.
- Provide bicycle and pedestrian connections to transit stops for multi-modal trips.
- Provide bicycle racks throughout the trail system, especially at transit stops.
- Provide continuous trails and walkways that connect to regional trails and walkways.
- Provide sidewalks as an integral component of the trail and walkway system.
- Provide marked crosswalks as an integral component of the trail and walkway system.
- Make bicycle and pedestrian routes easily acceptable.
- Provide designated trails, walkways and amenities that form a comprehensive bicycle and pedestrian circulation system.
- Provide posted large-scale maps and smaller handouts for all trails and walkways.

c. Aviation

Goal

Encourage efficient ground transportation to and from regional airports and support the improvement of regional commercial air service.

Strategies

- Play an active role in examining the need to provide regional transportation to airports.
- Work with other governments in support to improve commercial air service.

d. Rail

Goal

Support the efforts of the Roaring Fork Transportation Authority and play an active role in public transit feasibility analysis, planning and design. Promote the use of public transit as a means of reducing commuter and tourist auto traffic in the future. Continue supporting interstate passenger rail services and freight services through Glenwood Springs.

Strategies

- Participate in examining the need for valley-wide rail service.
- The City shall work with RFTA to ensure a comprehensive public participation
 process occurs that is designed to receive feedback from residents regarding their
 willingness to use rail service, willingness to pay and type of service desired.
- Prepare to integrate local transit with mass transit (rail) in the I-70 corridor.

e. Transit

Goal

Provide year-round bus service within the City in a safe, efficient and affordable manner which encourages people to use transit.

Strategies

- Provide year-round, in-city bus service in Glenwood Springs.
- Share the responsibility of providing bus service to West Garfield County.
- Monitor transit amenities in the City.
- Support increased frequency of service and increased connection points for transit riders to encourage more people to use transit.
- Support RFTA and provide convenient transfer locations for riders wishing to travel regionally.
- Provide technical assistance and support to RFTA for the Corridor Investment Study and Bus Rapid Transit.

f. Parking

Goal

To provide parking that uses land efficiently, is aesthetically pleasing, pedestrian and bicycle friendly and reduces traffic congestion. Support the efforts of the Downtown Development Authority (DDA) in finding parking solutions in the downtown core.

Strategies

- Continue to update and monitor the parking supply and demand in Downtown.
- Support and Promote the Transportation Demand Management Program to lessen the demand for parking.
- Promote bicycle parking spaces and adopt standards for the location and design of bicycle parking facilities.
- Periodically review off-street parking requirements in Section 070.050.060 of the Municipal Code to ensure a balance with parking needs and consistency with the Comprehensive Plan.
- Build Park'n'Ride lots to serve mass transit.

g. Transportation Demand Management Program

Goal

Minimize the number of vehicle trips within Glenwood Springs by encouraging, supporting and providing alternative forms of transportation, carpooling/vanpooling and decreasing the number of single occupancy vehicles (SOV) traveling throughout Glenwood Springs.

Strategies

- Decrease SOV use by 1% each year.
- Increase use of alternative transportation for the work commute and reduce vehicle trips.
- Increase use of alternative transportation beyond the work commute, including school districts and vacationers.
- Continue to communicate Transportation, Responsibility and You (TRY) logo and One Day at a Time, One Trip at a Time tag line.
- Improve community awareness of transportation alternatives of bus, bicycling, carpooling, vanpooling, teleworking and other programs through TRY.

VIII. Local Transportation Projects

- A. Completion of River Trail
- B. Confluence Area Transportation and Parking Improvements
- C. Downtown Parking Structure
- D. Intersection Improvements at Highway 6 and Donegan Road, Highway 6 and Traver
 Trail, 27th Street and South Grand Avenue, 27th Street and Midland Avenue
- E. Midland Ave and Four Mile Road Intersection Improvements
- F. Midland Avenue Safety Improvements
- G. Signage of On Road circulating Bicycle Route
- H. South Bridge Project
- I. Trail Construction from Two Rivers Park to the Community Center
- J. 23rd and Grand Avenue Intersection Improvements
- K. Wulfsohn Road Signalization, Widening of Midland Avenue, 8th and Midland Intersection Improvements

A. Completion of River Trail

Project Description

The Glenwood Springs River Trail will extend from West Glenwood to south Glenwood Springs along the Colorado and Roaring Fork Rivers. Currently, the Trail is completed from Two Rivers Park to 23rd Street with a crossing of the Colorado River. To complete the trail, a bridge is needed to cross the Roaring Fork River and construction of the trail to the south along the river. Another portion of the trail, connecting 8th Street to West Glenwood will align south of the river across the Wulfsohn Ranch (Glenwood Meadows) property and eventually connect to the proposed LOVA Trail in Garfield County. The exact locations of the trail and the alignment are unknown at this time.

Need for Project

Pedestrian and bicycle amenities will greatly enhance the quality of life for the residents of Glenwood Springs and make Glenwood a beautiful, pedestrian friendly place to visit. The River Trail will provide a transportation corridor separate from vehicular paths while providing a beautiful view and convenient way to travel through Glenwood Springs by walking or biking. To create this thoroughfare, the trail needs to be completed from south Glenwood Springs to the current River Trail and extended from 8th Street out to West Glenwood.

Estimated Project Cost

The total cost of this project is unknown at this time.

Project Location

The River Trail is located next to the Roaring Fork River and will extend from West Glenwood to south of Glenwood Springs. It is proposed to connect to the LOVA Trail in west Garfield County and RFTA's uncompleted trail from Glenwood Springs to Carbondale.

See attached map, figure 5, for proposed project locations.

B. Confluence Area Transportation and Parking Improvements

Project Description

There are two phases to this project with phase 1 being completed in 2002.

Phase 1: This phase involved reconstructing 8th Street from Pitkin Avenue to the westerly end of City Hall and constructing a parking lot at the old MOC site.

Phase 2: This phase involves constructing the 8th Street under the railroad tracks and connecting it to the existing Roaring Fork River Bridge, and relocating the easterly leg of the railroad wye so that only one railroad underpass is needed and to make more property contiguous to City Hall and the Courthouse available for redevelopment.

Need for Project

Downtown Glenwood Springs has an increasing amount of traffic entering from Midland Avenue. Currently, traffic must turn off 7th Street in order to access Grand Avenue at the 8th Street signal. The confluence area transportation projects will create a better alignment from Midland Avenue into downtown via 8th Street and allow for redevelopment of the property located near City Hall and the County Courthouse.

Estimated Project Cost

Phase 1 cost approximately \$1 million when completed. Phase 2 is estimated to cost an additional \$4 million when completed.

Project Location

The confluence area transportation projects are located in the area from Pitkin Avenue to the Roaring Fork River Bridge with a connection to 8th Street at the current 8th Street and Midland Avenue intersection.

Please see attached map, figure 4, for the proposed project location.

C. Downtown Parking Structure

Description of Project

A parking structure is one solution to the ever-increasing demand for parking in the downtown core of Glenwood Springs. The parking structure could be multi-level above or below ground with retail and/or commercial development included in the structure.

Need for Project

Downtown Glenwood Springs has an increased demand for parking as more and more tourists, employees and businesses come to downtown. Currently, there are all-day storage surface parking lots on the fringes of downtown with short-term on street parking for higher turnover parking spaces. The Parking Recommendation, Downtown Plan and Confluence Plan identify the need for more parking with a limited amount of land available. A parking structure can be built in a smaller area while providing a greater amount of additional parking (as compared to a surface lot) for downtown Glenwood Springs.

Estimated Project Cost

The cost of the parking structure has yet to be determined. It is dependent on location and size.

Project Location

The primary location for the parking structure has been identified as the old fire station on the corner of 8^{th} Street and Cooper Street.

D. Intersection Improvements at Highway 6 and Donegan Road, Highway 6 and Traver Trail, 27th Street and South Grand Avenue, 27th Street and Midland Avenue

Project Description

The intersections described above will be handling an increasing amount of traffic in future years. To better handle the traffic, intersection improvements must be made. These improvements include traffic signals at all pre-mentioned intersections. In addition to signalizing the intersection of Traver Trail and Highway 6, Traver Trail will be realigned to meet Highway 6 and improve pedestrian access at that intersection.

Need for Project

Future increases in traffic will create more congested intersections around Glenwood Springs. To handle the increased traffic, signalization of specific intersections will be needed to relieve congestion, shorten queue length, and create better traffic patterns at the busiest intersections on and off the state highway system.

Estimated Project Cost

The total cost of these projects has yet to be determined.

Project Location

The specific intersections identified are located in Glenwood Springs.

See attached map, figure 4, for proposed project locations.

E. Midland Ave and Four Mile Road Intersection Improvements

Project Description

The intersection of Midland Avenue and Four Mile Road will see increased capacity with the growth on the Four Mile corridor. The intersection will be reconstructed from its T-alignment to a three-leg, single-lane roundabout. Additional projects along Midland Avenue are outlined in sections B, D and F of this chapter.

Need for Project

Roundabouts provide better capacity and less delay than signalized intersections. With the proposed South Bridge project, future traffic growth in this area will be better served by a roundabout. Safety will also be improved with the installation of a roundabout at this growing intersection with vehicles traveling at lower speeds and a reduction in the number of conflict points.

Estimated Project Cost

This project is estimated to cost \$400,000 and is in progress. The date of completion is unknown at this time..

Project Location

The project is located at the intersection of Four Mile Road and Midland Avenue in South Glenwood Springs.

See attached map, figure 4, for project location.

F. Midland Avenue Safety Improvements

Project Description

Midland Avenue is a two-lane vehicular path with limited shoulders and pedestrian amenities. The proposed safety improvements would widen the road to include shoulders and pedestrian amenities such as sidewalks, crosswalks and appropriate pedestrian safety measures. In addition to pedestrian safety improvement on south Midland, traffic calming measures will be put into place on north Midland near 13th Street. Additional projects along Midland Avenue are included in separate sections of this chapter.

Need for Project

Sopris Elementary School and Mountain Valley Developmental Services are both located at the southern end of Midland Avenue. Both facilities generate a lot of pedestrian traffic and safer conditions should be constructed to allow those pedestrians to travel securely along Midland Avenue. Providing a shoulder will create a safer vehicular path and allow for appropriate snow storage in the winter months. North Midland, near 13th Street, has high pedestrian traffic as well and increased traffic calming measures need to take place to provide the pedestrians with as much safety as possible.

Estimated Project Cost

The cost of this project is unknown at this time.

Project Location

One portion of this project is located on north Midland Avenue near the vicinity of 13th Street and the other portion of this project extends along Midland Avenue south of 27th St. and extending to Mount Sopris Drive.

See attached map, figure 4, for project location.

G. Signage of On-Road Circulating Bicycle Route

Project Description

Glenwood Springs serves an avid cycling population and connects to the Glenwood Canyon Trail, McClure Pass and Independence Pass, some of the many on-road bicycle routes in the Roaring Fork Valley. This project would provide signage on roads designated as the on-road bicycle route. The on-road bicycle route provides a transportation path for in-City bike commuting as well as a path for people who inter-city commute. Not all of the route is on-road, however. Cyclists are encouraged to ride on the sidewalk in certain areas due to congestion and/or a lack of shoulder and the River Trail is designated as a bike thoroughfare and cyclists are encouraged to ride there when possible. Please see figure 3 for the details of the on-road bike route. Signs on the trail-portion of the route would indicate that cyclists passing would need to make an audible noise when passing as to alert other trail users of their approach.

Need for Project

Signs for the on-road bike route are needed to inform cyclists of the designated route they should be following and to inform motorists that they should share the road with cyclists. There are a few signs still left from earlier bike routes and those can be misleading and indicate a wrong path. Those signs should be removed and new signs designating the correct path should be put up around Glenwood Springs.

Estimated Project Cost

There are approximately 42 signs at approximately \$50 each.

Project Location

Please see the attached map, figure 6, for the proposed locations of the on-road bike route signs.

H. South Bridge Project

Project Description

The City of Glenwood Springs and Garfield County plan to extend the City's Midland Avenue Alternate Route project to connect with Highway 82 at the south end of the City, and to provide improved access to the Four Mile Road corridor in Garfield County, which includes access to Sunlight Mountain Resort. Local road improvements, including a bridge spanning the Roaring Fork River, will be constructed to allow access to SH 82 south of Glenwood Springs. At this time, the exact location of this portion of the alternate route is unknown due to the uncertainty to keep the Glenwood Springs Municipal Airport open.

Need for Project

Glenwood Springs has limited access to SH 82 and a southern access will assist in alleviating some of the traffic off of Grand Avenue and creating another through road off of the "Main Street". New development in south Glenwood Springs and up the Four Mile Corridor will create more traffic that will require access to SH 82 and providing a south entrance closer to the developments is needed.

Estimated Project Cost

The City's portion of local improvements for this project are estimated to be \$9-\$12 million depending on the fate of the airport and the chosen alignment of the bridge spanning the Roaring Fork River.

Project Location

This project will continue from Airport Road, cross the Roaring Fork River and railroad, and meeting SH 82 at County Road 115.

See attached map, figure 4, for proposed project location. The exact project location is unknown at this time and is dependent on the fate of the airport.

I. Trail Connection from Two Rivers Park to the Community Center

Project Description

Pedestrian and bicycle paths between recreation areas are necessary to provide transportation to those wishing to utilize alternatives to the passenger vehicle. This trail would connect Two Rivers Park to the Community Center by providing a trail that would include a bridge spanning the Colorado River, an overpass or underpass spanning the railroad tracks and Midland Avenue, and would provide a pedestrian/bicycle pathway connecting the two areas.

Need for Project

Currently, there is not a direct connection from Two Rivers Park to the Community Center and pedestrians and cyclists have to travel on the sidewalks and/or roadways to get to these facilities. The route they have to take is indirect and a shorter, more direct route would encourage people to travel using the trail system and provide a missing link in the pedestrian/bicycle circulation system.

Estimated Project Cost

The cost of this project is unknown at this time.

Proposed Project Location

This project would begin at Two Rivers Park, near Devereaux Rd., continue to the southwest, and connect to Wulfsohn Rd. near the Community Center.

See attached map, figure 5, for proposed project location.

J. 23rd and Grand Avenue Intersection Improvements

Project Description

The intersection of 23rd Avenue and SH 82 (Grand Avenue) will be realigned to better serve pedestrian safety at the intersection. Currently there is an island separating the southbound lanes of SH 82 allowing the traffic turning right onto South Grand Avenue a straight shot with only a yield to other traffic. The project will remove the island, realign traffic and will require the construction of a bulbout to slow south bound traffic turning right by making the vehicles stop at a signal before turning, eliminating the higher speeds and yield to oncoming traffic.

Need for Project

The Glenwood River Trail begins at 23rd Street following the River north. Currently, there is a pedestrian/vehicular interface that is not safe for pedestrians crossing to begin the River Trail. Currently, cars do not yield to pedestrians (only to oncoming traffic) and do not have to come to a complete stop before continuing on South Grand Avenue. With the amount of pedestrians increasing in this area to access the River trail, a safer intersection for the pedestrian/vehicular interface is required.

Estimated Project Cost

The transportation improvements at this intersection are approximately \$150,000 and will be completed in 2003.

Project Location

The project is located at the intersection of SH 82 and 23rd Street with pedestrian crossings on all four legs of the intersection. The realignment will occur on the southbound and westbound legs of the intersection.

See attached map, figure 4, for project location.

K. Wulfsohn Road Signalization, Widening of Midland Avenue, $\mathbf{8}^{\text{th}}$ and Midland Intersection Improvements

Project Description

Glenwood Meadows, a proposed development on the south side of Midland Avenue, will have commercial and residential development and Wulfsohn Road will be completed to access the development. Midland Avenue will be widened to four lanes to increase capacity and allow traffic to flow freely at the build-out of the development and both intersections of Wulfsohn Road and Midland Avenue will be signalized to allow better traffic flow. The intersection of 8th Street and Midland Avenue will be improved to handle the volume of traffic that travels on Midland Avenue and enters the downtown through 8th Street.

Need for Project

Glenwood Meadows, when built-out, will generate 21,000 trips per day and Midland Avenue, at its current capacity, will be unable to handle that amount of traffic without significant congestion. The proposed projects will be completed by the developers of Glenwood Meadows and will create more capacity on Midland Avenue and Wulfsohn Road. The increased capacity will require the 8th Street and Midland Avenue intersection to be improved to better handle the volume traveling through the intersection.

Estimated Project Cost

The total cost of the above projects is \$1.25 million. This estimate is from the Glenwood Meadows development plan.

Project Location

Glenwood Meadows will be located at the base of Red Mountain on the south side of Midland Avenue with access to the development from Wulfsohn Road. The transportation improvement projects associated with the development will be on the Midland Avenue corridor.

Please see attached map, figure 4, for proposed location.

IX. Transportation Projects on State Highway System

- a. Mobility Projects
 - . Vehicular
 - Relocation of State Highway 82
 - Interchange Construction, SH82 and Garfield County Road
 - West Glenwood interchange (Exit 114) Improvements
 - ii. Bicycle/Pedestrian
 - Trail Construction, Two Rivers Park to No Name Tunnels
 - Trail Construction, Glenwood Springs to South Canyon
 - Trail Construction, Glenwood Springs to Carbondale
 - iii. Transit
 - Glenwood Springs Transit Stations and Park and Ride Facilities
 - iv. ITS
 - Transportation Demand Management (TDM) Measures in Glenwood Springs
 - City Traffic Model
- b. System Quality Projects
 - i. Vehicular
 - 1. South Bridge Project
 - 2. Sunlight Bridge
 - 3. Intersection Reconstruction: I-70, Highway 6, SH 82
 - ii. Transit
 - 1. Glenwood Springs Local Transit Service, Ride Glenwood Springs
- c. Safety Projects
 - i. Vehicular
 - ii. Bicycle/Pedestrian
 - Highway 82 Pedestrian Improvements including Traffic Calming and Streetscape Improvements
 - Pedestrian Bridge Over I-70 at Devereux Road

a. Mobility Projects

- 1. Relocation of State Highway 82
- 2. Interchange Construction, SH82 and Garfield County Road
- 3. West Glenwood interchange (Exit 114) Improvements
- 4. Trail Construction, Two Rivers Park to No Name Tunnels
- 5. Trail Construction, Glenwood Springs to South Canyon
- 6. Trail Construction, Glenwood Springs to Carbondale
- 7. Glenwood Springs Transit Stations and Park and Ride Facilities
- Transportation Demand Management (TDM) Measures in Glenwood Springs
- 9. City Traffic Model

1. Relocation of State Highway 82

Project Description

The corridor for the relocation has been identified from Exit 114 along Midland Ave., crossing the Roaring Fork River and continuing along the rail corridor until 23rd Ave connecting to the existing Highway 82. It is expected that the relocated Highway 82 would be a limited access highway to efficiently move through truck, auto and bus traffic from I-70 to the southern end of the City, bypassing the downtown area. It involves reconstructing Exit 114 and installing a bridge over the Roaring Fork River to connect to 8th Street, depending on the exact location of the preferred corridor. It also includes constructing an additional road, details depending on preferred corridor, following the rail corridor and a possible reconstruction of the 23rd Street intersection where it potentially will connect with the existing Highway 82.

Need for Project

This project would provide additional highway capacity through downtown Glenwood Springs, specifically designed to divert "non-local" traffic (i.e., traffic that is passing through the City rather than to the City of from place to place within the City) off of Grand Avenue in the downtown area. Many citizens of Glenwood Springs feel that the volume of traffic on Grand Avenue, and particularly the expected future traffic volume, is inconsistent with City goals of preserving the small town character of the City and livability, friendliness and economic vitality of the downtown area. If traffic volumes on Highway 82 double within the next 27 years, as many projections indicate they may, the existing Highway 82 on Grand Avenue will be unable to handle the traffic. A limited access bypass to divert through traffic, particularly through truck traffic, off of Grand Avenue is the desired solution to the problem.

This project has regional significance and will more efficiently move regional traffic through Glenwood Springs without the added inconvenience of stopping at traffic lights and congestion with local traffic. Glenwood Springs and SH82 is a tourist/commuter corridor and non-local traffic utilizes the roadway daily. Approximately 30,000 vehicles pass over the Grand Avenue Bridge a day. A limited access highway would provide Glenwood with congestion relief and more efficiently move traffic (local and non-local) through Glenwood. In addition to passenger cars, freight vehicles travel through Glenwood servicing the upper Roaring Fork Valley. SH82 is the only means for freight vehicles to travel to the upper-valley which adds considerable noise and pollution to downtown Glenwood Springs. Creating a more convenient route for service vehicles serving the upper-valley to pass through Glenwood Springs would ease much of the congestion, noise and pollution within Glenwood Springs.

Estimated Project Cost

This is a cost estimate based on the 1999 analysis of Balloffet and Associates, Inc. in their Glenwood Springs State Highway 82 Alternatives. The approximate cost is \$53 million. Additional information on the costs associated with this project can be found in Appendix A.

Project Location

The project is located in Glenwood Springs and will extend from I-70 on the north to Highway 82 in the vicinity of 23rd Ave. on the south. The specific corridor location has yet to be determined. The preferred corridor which parallels the rail corridor, seen in figure 4, has acquired much of the right-of-way. Potential corridor locations, which will be examined in the Environmental Impact phase, will be considered and include one that parallels the rail corridor and another lying on the west side of the Roaring Fork River in the vicinity of Midland Avenue. Other corridors, or a combination of the above, will be evaluated.

Please see attached map, Figure 4, for proposed location.

2. Interchange Construction, SH82 and Garfield County Road

Project Description

This project is a proposed new intersection or interchange with Highway 82 south of Glenwood Springs near the existing Holy Cross Electric and Red Canyon Road intersections. The project is currently in the State's 2020 Plan (STIP). The interchange construction would be combined with proposed local road improvements by the City of Glenwood Springs and Garfield County to extend the City's Midland Avenue Alternate Route project to connect with Highway 82 at the south end of the City, and to provide improved access to the Four Mile Road corridor in Garfield County, which includes access to Sunlight Mountain Resort.

Need for Project

The project will provide further traffic relief on Highway 82 in Glenwood Springs beyond the benefits realized from the completion of the first phase of the Alternate Route. It will also provide more efficient traffic movement between Highway 82 and the Four Mile corridor, including Sunlight Mountain Resort and the other potential growth areas at the south end of Glenwood Springs and in the Four Mile area of Garfield County. It will relieve traffic congestion that is expected to occur on the City's local street system, particularly in the vicinity of 27^{th} Street and the Sunlight Bridge, with projected increases in future traffic volumes.

The project will also offer the opportunity for consolidating existing intersections on Highway 82 in the vicinity of the Buffalo Valley Restaurant, Holy Cross Electric and Red Canyon Road. This consolidation could provide significant safety benefits to this stretch of Highway 82.

Estimated Project Cost

The approximate cost is \$2.2 million. This cost estimate is based on DMJM's analysis on the entire project to be completed by the City of Glenwood Springs, Garfield County and CDOT for \$14 million, depending on alignment and bridge location selected.

Project Location

The project is located on Highway 82 south of Glenwood Springs near the intersection with Red Canyon Road (Co. Rd. 115). Near milepost 3.70.

Please see attached map, Figure 4, for proposed location.

3. West Glenwood interchange (Exit 114) Improvements

Project Description

This project consists of capacity and geometric improvements to enhance traffic flow accessing, exiting and passing beneath I-70 at this location. The improvements may include widening or addition of lanes on the exit and entrance ramps and the addition of turn lanes or other capacity enhancements for traffic passing beneath I-70. The Glenwood Meadows Development is committed to build roundabouts on both sides of the interstate at this location, but the built-out traffic projections with the current on and off ramps will be at capacity in 2015. This project would increase flow of traffic assuming the roundabouts, to be built by Glenwood Meadows, are in place.

Need for Project

Future traffic projections indicate that the interchange will be at capacity in 2015. Assuming the roundabouts are in place at that time, additional lanes need to be added or geometric changes will need to be made. The growth in West Garfield County and the regional commuting patterns will require the interchange be constructed to meet the traffic demand.

Estimated Project Cost

The cost of this project is estimated to be \$4 million, but is subject to change depending on the final design chosen.

Project Location

This project is located at Exit 114 on I-70 in West Glenwood.

See attached map, **Figure 4**, for proposed project location.

4. Trail Construction, Two Rivers Park to No Name Tunnels

Project Description

This project includes three components: 1) the construction of a new trail from the existing City River trail at Two Rivers Park to the Vapor Caves, 2) the improvement of the existing trail between the Vapor Caves and the No Name Curve after the I-70 crossing at the No Name Tunnels, including the crossing of I-70, and 3) the replacement of the failing gabion wall along the north side of the roadway that serves as the trail to be improved under item 2 above.

Need for Project

The overall need for this project is to provide an attractive and user-friendly trail connection between the City and the popular Glenwood Canyon Trail. This connection will provide recreational benefits to the citizens of Glenwood Springs and our visitors, and will provide economic benefits from the additional tourists it will attract. It will also result in a slight reduction in vehicular traffic by eliminating the need that many people currently feel to drive from Glenwood Springs into Glenwood Canyon to conveniently access the Glenwood Canyon Trail.

- 1) The First component of this project is needed to provide a trail connection between the City's River trail system and the heavily used and popular Glenwood Canyon Trail. The City's River Trail system currently has its north terminus in Two Rivers Park near the confluence of the Colorado and Roaring Fork Rivers. Visitors and locals have to get through the heavy traffic of the I-70 underpass at Exit 116 and use a circuitous street network to get from this location to the Vapor Caves east of the Hot Springs Pool, where a frontage road on the north side of I-70 provides trail access to the Glenwood Canyon Trail. The streets that must be traversed are typically narrow and not designed for bicycle and pedestrian traffic.
- 2) The second component of this project would improve the current frontage road along the north side of I-70 between the Vapor Caves and the I-70 crossing at No Name Tunnels to provide more of a trail appearance and atmosphere in comparison to the current frontage road. It would provide safety and landscape improvements adjacent to the to the north side of the westbound I-70 lanes to physically and visually separate bicycle/pedestrian use on the recreation path from vehicular traffic on I-70. The existing steep grade on the approach to the pedestrian overpass (both directions) at the No Name Tunnels would be flattened to a grade that can be readily negotiated by all trail users. The portion of the trail after the I-70 crossing requires improvements to the broken pavement for safety purposes.
- 3) The third component of the project is needed to replace some or all of the slowly failing gabion wall on the north side of the trail discussed in item 2 above. The continued deterioration and potential failure of this wall threatens the existence and safety of the trail below it. The deterioration of the wall also threatens to destroy the landscaping on the slopes created by the wall.

Estimated project Cost

Component 1: \$1.5 million

Component 2: \$500,000, completed in a 1994 Enhancement Funding proposal inflated to 2003 costs

Component 3: \$2 million depending on how much of the wall needs replacement

Project Location

In Glenwood Springs along the I-70 and Colorado River corridor from Two Rivers Park on the southwest to the No Name Tunnel area on the northeast.

See attached map, Figure 5, for proposed location.

5. Trail Construction, Glenwood Springs to South Canyon

Project Description

This project consists of the construction of a multi-use trail along the I-70 and Colorado River corridor from the western end of Glenwood Springs to South Canyon. The length of the trail will be approximately 14,000 feet to the South Canyon Bridge over the Colorado River.

Need for Project

The project would provide a trail connection from the Glenwood Springs River Trail system, which is currently planned to terminate in the West Glenwood Springs area, to the South Canyon area, a large area of mostly undeveloped City-owned parkland located south of I-70 about 2.5 miles west of the City. The trail would provide recreational opportunities in itself and would provide pedestrian and bicycle access to the recreational opportunities in the South Canyon parklands. The trail could also serve as a segment of a future trail extending even further west along the I-70 corridor to the Rifle area and serve as a segment of the proposed LOVA Trail.

Estimated project Cost

\$2 million

Project Location

Along the Colorado River and I-70 corridor from the West Glenwood interchange (approx. M.P. 114) west to the South Canyon interchange (approx. M.P. 111.5).

Please see attached map, Figure 5, for proposed location.

6. Trail Construction, Glenwood Springs to Carbondale

Project Description

This project consists of construction of a multi-use trail from Glenwood Springs to Carbondale. It is anticipated that this trail will be mostly located along the RFTA right-of-way. If this trail construction is not included in the possible construction of rail or busway facilities in the corridor, the City requests that it be included as a separate project in the region's 2030 plan.

Need for Project

This project will provide a trail extension from the Glenwood Springs River trail system to Carbondale, and ultimately will form part of the valley-long trail system envisioned from Glenwood Springs to Aspen. The trail will provide recreational opportunities for the City's and the valley's residents and visitors.

Estimated Project Cost

Approximately \$2.25 million

Project Location

The trail will generally be along the RFTA rail right-of-way from Glenwood Springs to Carbondale. Portions of the trail may deviate from the right-of-way where it is determined that a better location exists.

Please see attached map, Figure 5, for proposed project location.

7. Glenwood Springs Transit Stations and Park and Ride Facilities

Description of Project

This project would involve the construction of transit stations and an associated park and ride facility in conjunction to enhance mass transit in the I-70/Highway 82 corridor from Rifle to Aspen. It is anticipated that two transit stations would initially be built, one near downtown Glenwood Springs in the rail wye area, and a second in the west Glenwood area near the Union Pacific railroad tracks. The West Glenwood Station would include a park and ride lot to accommodate downvalley commuters using the mass transit system. It would also serve as a park and ride facility to transport downtown Glenwood Springs' employees to work, via rail or City bus, to alleviate congestion and parking problems in the City's downtown core. This park and ride lot will have about 60 parking spaces per acre on approximately five acres of land. Another park and ride lot is proposed for south Glenwood Springs to intercept employees living in south Glenwood traveling downvalley and downvalley residents trying to pass through Glenwood Springs.

If transit stations and park and rides are not otherwise included in the plans for implementation of RFTA's BRT project, the City of Glenwood Springs requests that they be included separately in the ITPR 2030 plan.

Need for Project

The two initial transit stations are needed to effectively provide access to the mass transit system in the Rifle to Aspen corridor. The West Glenwood station, with a park and ride lot, will serve commuters living in downvalley locations and reduce congestion on Highway 82 through Glenwood Springs. The downtown station will be located near the population center of the City and will serve the majority of the Glenwood Springs population. It will also provide access to upvalley residents to Glenwood's downtown commercial and recreational attractions. The south Glenwood park and ride will intercept employees living in south Glenwood traveling downvalley and downvalley residents trying to pass through Glenwood Springs and will help alleviate congestion on the Highway 82 corridor through Glenwood Springs' downtown.

Estimated Project Cost

West Glenwood Transit Station and Park and Ride: \$750,000 for land acquisition (5 acres), \$1.2 million for park and ride lot (60 spaces/acre) and \$100,000 for transit station.

Downtown Glenwood Transit Station: \$100,000 for transit station.

South Glenwood Springs Park and Ride: Land acquisition costs vary depending on location, 100 parking spaces/acre at \$3000/parking space.

Project Location

Downtown Glenwood near the railroad wye, West Glenwood area near the Union pacific Railroad tracks, and in south Glenwood at an undetermined specific location at this time, but would be near the vicinity of the new proposed south interchange with Highway 82.

See attached map, Figure 7, for proposed locations.

8. Transportation Demand Management (TDM) Measures in Glenwood Springs

Project Description

The City has implemented a TDM program to assist in alleviating commuter congestion during peak driving times. Examples of programs that may be considered, besides the local and regional transit system projects identified, are ITS systems, additional carpool and vanpool programs, guaranteed ride home programs, preferential HOV parking, parking management, flex-time employment, bicycle and pedestrian programs and improvements, employer incentives, land use planning consistent with efficient transportation systems and transportation user education.

Need for Project

Utilization of some or all of the suggested programs is expected to reduce congestion and meet a portion of the area's mobility needs without the significant expenditure of funds necessary for capacity-increasing highway projects. The programs will better utilize the transportation facilities already in place.

Estimated project Cost \$100,000 per year

Project Location

City of Glenwood Springs

9. City Traffic Model

Project Description

The City of Glenwood Springs has been experiencing the effects of regional growth on its transportation system and a City Traffic Model could be designed and used to analyze traffic and impacts of construction projects and/or new developments in and around Glenwood Springs.

Need for Project

New traffic signals, that will not be on the State Highway System, are proposed in the Long Range Plans and to be able to operate and move traffic efficiently through town a City Traffic Model is necessary. A City traffic model would assist in transportation planning, land use planning and future growth planning in Glenwood Springs.

Estimated project Cost

City Traffic Model to be calibrated for 10 years would cost approximately \$50,000.

Project Location

City of Glenwood Springs

b. System Quality Projects

- 1. South Bridge
- 2. Glenwood Springs Local Transit Service, Ride Glenwood Springs
- 3. Sunlight Bridge
- 4. Intersection Reconstruction: I-70, Highway 6 and SH 82

1. South Bridge Project

Project Description

The City of Glenwood Springs and Garfield County plan to extend the City's Midland Avenue Alternate Route project to connect with Highway 82 at the south end of the City, and to provide improved access to the Four Mile Road corridor in Garfield County, which includes access to Sunlight Mountain Resort. Local road improvements, including a bridge spanning the Roaring Fork River, will be constructed to allow access to SH 82 south of Glenwood Springs. At this time, the exact location of this portion of the alternate route is unknown due to the uncertainty to keep the Glenwood Springs Municipal Airport open.

Need for Project

Glenwood Springs has limited access to SH 82 and a southern access will assist in alleviating some of the traffic off of Grand Avenue and creating another through road off of the "Main Street". New development in south Glenwood Springs and up the Four Mile Corridor will create more traffic that will require access to SH 82 and providing a south entrance closer to the developments is needed.

Estimated Project Cost

The City's portion of local improvements for this project are estimated to be \$9-\$12 million (costs include 20% contingency) depending on the fate of the airport and the chosen alignment of the bridge spanning the Roaring Fork River. The off-system bridge which will span the Roaring Fork River is estimated to cost \$3.3-\$6.5 million (costs include 20% contingency) depending on the alignment chosen.

Project Location

This project will continue from Airport Road, cross the Roaring Fork River and railroad, and meeting SH 82 at County Road 115.

See attached map, **Figure 4**, for proposed project location. The exact project location is unknown at this time and is dependent on the fate of the airport.

2. Glenwood Springs Local Transit Service, Ride Glenwood Springs

Project Description

Ride Glenwood Springs operates two fixed routes servicing Glenwood Springs 365 days a year from 7:00am to 10:00pm. The City currently contracts with RFTA to operate the service and coordinates routes and times to make transfers to regional service as convenient as possible. The service is successful and anticipates a demand for additional service in the future. Plans are to expand the routes to better serve the residential areas and to increase the frequency of the service to 15-minute headways. The City anticipates to increase the number of buses by three in the mid-term future. The City would also like to be eligible for funding assistance for operation of the expanded service, or to cooperate with other transit providers in the area to achieve an increased level of service.

Along with expanding service, the City anticipates adding certain amenities that will make it more attractive and convenient for persons using transit. Included are additional bus pullouts, bus shelters, bike racks or lockers, etc.

Need for Project

Increased transit service is one component of the City's transportation plan aimed at reducing congestion and increasing mobility and transportation options for the citizens of Glenwood Springs and the surrounding area. The Healthy Mountain Communities Study of Local and Regional Travel Patterns (1998) states that Glenwood Springs has a very strong market for local commuter transit services. Increased transit ridership will result in fewer vehicles on Highway 82 and fewer parking problems in the City's downtown area.

Estimated Project Cost

30-minute service will cost approximately \$1.2 million per year. Bus replacement costs will be an additional \$150,000 per year. 15-minute service will cost an additional \$1.2 million per year and bus replacement costs would be an additional \$80,000 per year, approximately. The bus shelters and bus pullouts will cost approximately \$750,000.

Project Location

City of Glenwood Springs

Please see attached map, Figure 7, for proposed locations of bus pullouts, bus stop shelters, etc.

3. Sunlight Bridge

Project Description

The Sunlight Bridge spans the Roaring Fork River and connects SH 82 to Midland Avenue allowing access to the four mile corridor. The Sunlight Bridge was resurfaced in 2001 by the City of Glenwood Springs. The surface treatment applied was designed for 10-15 years and it is anticipated that another surface treatment and/or reconstruction will be needed in the next 30 years. The reconstruction is dependent upon the completion of the South Bridge project. If the South Bridge project is completed then the Sunlight Bridge will not need added capacity to handle the increased traffic in south Glenwood Springs and up the four mile corridor and a resurfacing most likely will be appropriate.

Need for Project

The Sunlight Bridge was resurfaced in 2001 with a life of 10-15 years. Over the next 30 years, another resurfacing will be required to keep the bridge in good standing. As mentioned above, the bridge may need to be reconstructed to add capacity to keep up with added demand from growth in and around Glenwood Springs.

Estimated Project Cost

The cost at this time is unknown as the type of project to be completed has yet to be determined. It is estimated that a new bridge will be approximately \$2 million.

Project Location

The Sunlight Bridge is located in Glenwood Springs on 27th Street west of SH 82.

See attached map, Figure 4, for proposed project location.

4. Intersection Reconstruction: I-70, Highway 6, SH 82

Project Description

The intersection of I-70, Highway 6 and SH 82 currently consists of 2 signalized intersections and an interstate interchange. It is the busiest intersection in town because of its proximity to the entrance into Glenwood Spring's Grand Avenue (SH 82) and main street district. Currently, the area is very congested, especially at peak times, and queue lengths can back up onto the interstate. A design for this project has not been identified, but to alleviate congestion in the future with anticipated traffic growth, a solution to this area is required.

Need for Project

Currently, this intersection is congested at peak times from traffic entering off the interstate in the morning and getting on in the evenings. Highway 6 intersects this traffic and then all traffic traveling on SH 82 must cross the Grand Avenue Bridge to begin the journey up-valley. With these three state highways intersecting in this area, traffic flows are heavy and current lane configuration requires cars to merge to one lane to cross the bridge. The queue lengths can be up to 20 or more cars and it is an area prone to accidents. Reconstructing this interchange intersection will be needed in the future as traffic levels increase.

Estimated Project Cost

The total project cost is dependent on the final design approved by CDOT. The estimated cost for this interchange is \$5 million.

Project Location

This project is located in Glenwood Springs at the intersection of Highway 6 and SH 82 with I-70 at Exit 116.

Please see attached map, **Figure 5**, for proposed project location.

c. Safety Projects

- Highway 82 pedestrian Improvements including Traffic Calming and Streetscape Improvements
- 2. Pedestrian Bridge over I-70 at Devereux Road

1. Highway 82 Pedestrian Improvements including Traffic Calming and Streetscape Improvements

Project Description

This project will consist of landscaping improvements and possible geometric changes to Highway 82 through Glenwood Springs. The project may involve construction of over/underpasses at certain intersections. Modifications would be made to make it more attractive and safer for pedestrians to cross the highway. The scope of the project will depend upon the likelihood and timing of the potential relocation of Highway 82 and the expected diversion of traffic from the downtown area that might result from the relocation. If a large diversion of traffic is expected in the mid-term future, the pedestrian improvements may appropriately wait for the relocation and then be designed with the reduced traffic volume in mind. If the diversions from the relocation are expected to be small of if the relocation project is not expected in the mid-term future, traffic calming measures and pedestrian improvements will be proposed in the near-term future to make the downtown area of Glenwood Springs more pedestrian friendly and to reduce the impacts of the traffic as much as possible. This project would also include replacing the pedestrian ramp adjacent to the Grand Avenue Bridge. The pedestrian bridge provides a safe pedestrian-way over the Grand Avenue Bridge. The bridge is currently not ADA compatible and needs to be brought up to modern standards.

Need for Project

The purpose of the project is to make Highway 82 through the downtown area of Glenwood Springs more combatable with the tourist-oriented atmosphere in this area. Downtown merchants frequently complain that highway traffic, and the speed of the traffic, is detrimental to their customers and their businesses. The intent is to make pedestrians in the area feel more comfortable crossing the highway and coexisting with the traffic through the area, and to better give drivers the sense that they are traveling through an area that they share with pedestrians. The project would allow the movement of Highway 82 to continue as necessary, but it would create the impression that the highway is less of a thoroughfare than it appears now and provide pedestrians with safer patterns of movement through downtown.

Estimated Cost of Project

Underpass/Overpass pedestrian crossing: \$200,000 (4)

Traffic calming intersections: \$100,000 for intersections from 8th to 23rd (6)

Pedestrian Bridge adjacent to Grand Avenue Bridge: \$300,000

Project Location

Highway 82 through Glenwood Springs, I-70 to 23rd Street (MP 0.00 to 1.405).

See attached map, Figure 5, for locations of proposed crossings.

2. Pedestrian Bridge Over I-70 at Devereux Road

Project Description

This project consists of the construction of a pedestrian and bicycle bridge over I-70 in the vicinity of, or attached to, the existing Devereux Road vehicular overpass. This project would also require additional work on Highway 6 & 24 to make the pedestrian and vehicular interface safer on the north end of the pedestrian bridge.

Need for Project

The existing vehicular bridge over I-70 at Devereux Road was built without any accommodations for pedestrians or bicycles. It has very narrow shoulders on the approaches and little, if any, shoulder on the overpass itself. The road has a fairly large percentage of truck traffic because it serves the railroad yards and industrial area along Devereux Road on the south side of the Colorado River and the CDOT maintenance yard at the west end of the overpass. A bridge to serve bicycles and pedestrians would provide a link to connect the bicycle and pedestrian facilities along Highway 6 and the frontage road on the north side of I-70 to the City's heavily used Two Rivers Park and the River Trail system on the south side of I-70.

Estimated Project Cost

The total cost of this project will be determined by the final design approved by CDOT. The estimated cost for this project is \$1 million.

Project Location

Across I-70 (approx. M.P. 115.75) in Glenwood Springs, extending from Highway 6 on the east to Two Rivers Park on the west.

See attached map, Figure 5, for proposed project location.

X. Project Evaluation Guidelines

The transportation projects previously listed in this document will far exceed expected revenues over the next 30 years. Therefore, it is pertinent for Glenwood Springs to prioritize the projects. The guidelines listed are consistent with the guidelines used at the Intermountain Transportation Planning Region. These guidelines are being used because CDOT prefers some consistency among the regions in the prioritization process and Glenwood Springs priorities will be consistent at the state level.

These project evaluation guidelines are consistent with Glenwood Springs' vision statement. A total of 17 criteria are used in the evaluation process, as well as weighted categories. Each project can score from 1 to 3 points, depending on how well the project achieves the criteria. A project has the potential to receive 117 points. The following table presents those criteria and the weights associated with each. The evaluation guidelines can be found below the table.

A. Project Evaluation Criteria

Project Evaluation Criteria

(from the 1999 Intermountain Regional Transportation Plan)

Vision Statement

To create an integrated transportation system that moves people and goods, provides modal choices, preserves the quality of life, promotes economic vitality, and exemplifies the small town environment that is Glenwood Springs.

Criteria	Rating	Weight	Possible Points
Does the project have support as defined by being considered High Priority by Glenwood Springs?	Yes/No	Pass/Fail	Pass/Fail
Does the project support local land use plans?	0-3	3	9
Does the project relieve congestion?	0-3	1	3
Does the project improve transportation system continuity?	0-3	2	6
Does the project preserve the existing transportation system?	0-3	3	9
Is the project intermodal or multimodal?	0-3	3	9
Is the project eligible for multiple funding sources?	0-3	2	6
Does the project enhance the environment or minimize the external environmental impacts?	0-3	2	6
Does the project preserve land?	0-3	2	6
Does the project maximize the efficiency of the transportation system?	0-3	2	6
Does the project minimize the number of trips?	0-3	3	9
Does the project minimize travel distances/times between housing and community services?	0-3	2	6
Does the project minimize disruption to communities?	0-3	3	9
Does the project minimize additional local capital or impose long-term maintenance costs on local governments?	0-3	3	9
Does the project support economic development?	0-3	1	3
Does the project have public support?	0-3	3	9
Does the project improve safety?	0-3	3	9
How easily can the project be implemented?	0-3	1	3
Total			117

B. Project Evaluation Guidelines

- 1. Does the project support local land use plans?
 - a. Intermediate and minor highway projects would get zero points
 - b. Intermediate and minor transit projects and minor rail projects could get up to one point
 - c. Pedestrian/bicycle projects could get up to one point
 - d. Major highway, transit, and rail projects could get up to three points
- 2. Does the project relieve congestion?
 - a. Major highway and transit projects could get up to three points depending upon level of congestion
 - b. Intermediate and minor highway and transit projects could get up to two points
 - c. Major intermodal projects could get up to two points depending on level of congestion
 - d. All other projects would get zero points
- 3. Does the project improve the transportation system continuity?
 - a. Major highway and transit projects that fill in gaps could get up to three points
 - b. Intermediate highway and transit projects could get up to one point
 - c. All other projects would get zero points
- 4. Does the project preserve the existing transportation system?
 - a. Intermediate and minor (except erosion control) highway, major (bus replacement only) and intermediate transit projects and major rail projects could get up to three points
 - b. All intermodal projects could get up to three points
 - c. Major highway projects could get up to one point
 - d. All pedestrian/bicycle projects could get up to one point
- 5. Is the project intermodal or multimodal?
 - a. A project can get up to three points if it involves more than one mode, depending on the number of modes served by the project
 - b. A project will get no points if it only involves one mode
- 6. Is the project eligible for multiple funding sources?
 - a. A project will be assigned no points if it can only be funded from one source
 - b. A project will get up to two points if it can be funded by up to two funding sources
 - c. A project will get up to three points if it can be funded by up to three or more funding sources
- 7. Does the project enhance the environment or minimize the external environmental impacts?
 - a. If a project has the potential for reducing the number of vehicles on the roadway system, it can get up to three points, depending on the potential for success
 - b. If a project makes it easier to use the private automobile, it will get no points
- 8. Does the project preserve land?
 - a. If the project will require the taking of land to implement, it will be given no points
 - b. If the projects makes improvements to the existing facilities without requiring more land, it could get up to three points
- 9. Does the project maximize the efficiency of the transportation system?
 - a. Any expansion of the highway system will get no points
 - b. Any improvements tot the existing transportation system could get up to three points depending on the mode and the potential for achieving the goal
- 10. Does the project minimize the number of trips?

- a. Any project which makes it easier to use the private automobile will get zero points
- b. Any project which provides an alternative to the private automobile could get up to three points depending on the potential of success
- c. Any project which will have no effect on getting people out of their car will get zero points
- 11. Does the project minimize travel distance/times between housing and community services?
 - a. Any project which makes it easier to use the private automobile will get zero points
 - b. Any project which provides an alternative to the private automobile could get up to three points depending on the potential for success
 - c. Any project which will have no effect on getting people out of their car will get zero points
- 12. Does the project minimize disruption to communities?
 - a. Points will be awarded based on the amount of additional land required to implement the project
 - b. Any project which make improvements to the existing transportation system will get three points
 - c. No points will be assigned for this criteria if the project would divide the community
- 13. Does the project minimize additional local capital or impose long-term maintenance costs on local governments?
 - a. A project will get three points if it represents a one-time expense like the replacement of a bridge or the installation of a traffic light
 - b. Points will be awarded based on the magnitude of the annual local expense required to support the investment
- 14. Does the project support economic development?
 - a. Points will be assigned to the project if it has the potential to cause the redevelopment of land in and around the project
 - b. A project will get no points if it is considered to be of a minor nature
 - c. A project could get up to three points if it will introduce a major new mode into the mix of transportation solutions
- 15. Does the project have public support?
 - a. Points will be assigned based on the level of controversy surrounding the project
- 16. Does the project improve safety?
 - a. Points will only be given to projects that will make the transportation system safer such as climbing lanes, geometric improvements, and the installation of traffic lights
- 17. How easily can the project be implemented?
 - a. A project will get three points if it does not require the taking of any lands or environmental studies
 - b. A project could get up to three points if the environmental process is completed and any additional land has been acquired
 - c. A project will get no points if it will have a significant environmental impact

C. Project Rankings

As described previously, each project can be classified into investment categories as a mobility (M), system quality (Q) or safety (S) project. Mobility projects include projects that increase capacity, system quality projects preserve the existing infrastructure and safety projects increase transportation safety and may include building new amenities. Below is the table indicating the projects described earlier and their importance in the Glenwood Springs transportation system. Each project has been labeled with an M, Q or S, depending on what kind of project it is, and the number indicates its ranked importance in each of the investment categories. For example, the Relocation of SH82 is ranked #1 in the mobility projects and the SH82 Pedestrian Improvements is ranked #2 in the safety projects. These rankings will be used at the regional transportation planning level and their rankings will indicate the importance to Glenwood Springs' overall transportation plan.

Table 2
Project descriptions and rankings within each investment category

Project Descriptions and Rankings

M= Mobility Projects

Q= System Quality projects

S= Safety Projects

Description	Rank by Investment Category
Relocation of SH 82	M 1
SH82 & Garco Rd Interchange	M 2
West Glenwood Interchange	M 3
Trail Construction; Two Rivers to No Name	M 5
Trail Construction; GWS to South Canyon	M 6
Trail Construction; GWS to Carbondale	M 7
Transit Stations and Park and Rides	M 8
TDM Measures	M 4
City Traffic Model	M 9
South Bridge	Q 1

Sunlight Bridge	Q 4
Interchange; I-70, Highway 6 and SH 82	Q 2
Ride Glenwood Springs	Q 3
SH 82 Pedestrian Improvements	S 2
Pedestrian Bridge over I-70	S 1

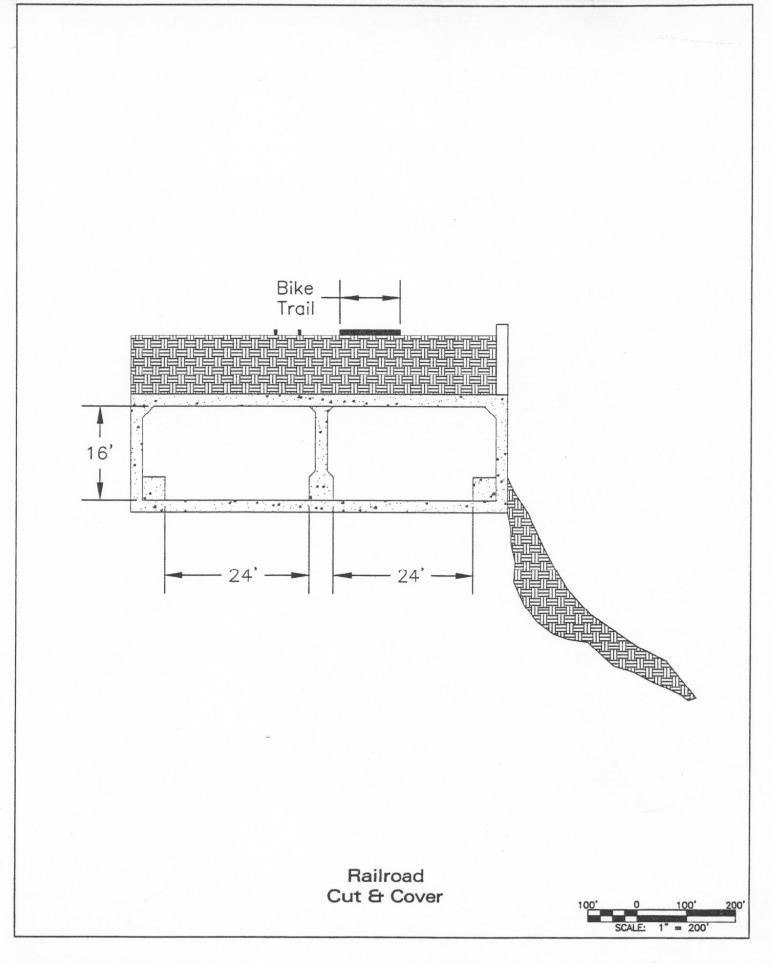
Appendix A: Details on Relocation SH 82

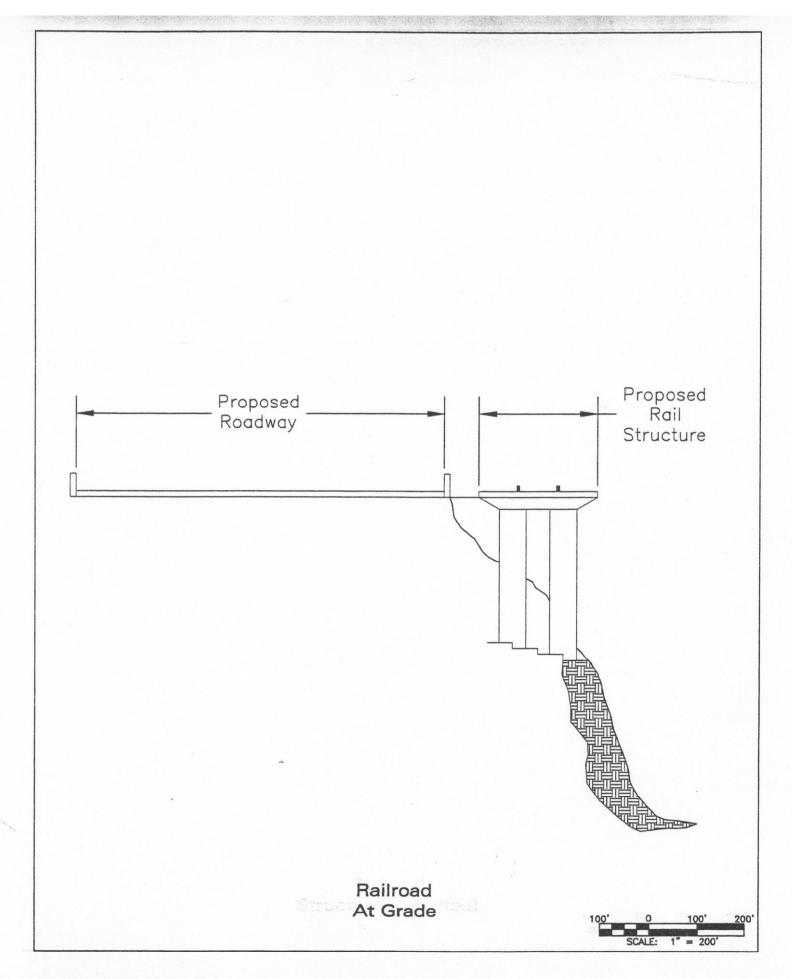
Notes on Relocation SH82

Looking at the preferred alternative, passing through the Railroad Corridor, from the 1999 Balloffet Study there are three options associated with that alternative: an at-grade option, an elevated structure option, and a cut-and-cover tunnel option. In each of these options, reconstructing Exit 116 was included in the costs. Since 1999, connecting the Relocation of SH82 to Exit 116 has been changed to a connection at Exit 114 and following Midland Avenue until a bridge which will span the roaring fork and continue the Relocation down the rail corridor until 23rd and Grand where a new interchange will be constructed. The following table adjusts the costs from the Balloffet Study to replace the Exit 116 interchange reconstruction and associated viaduct costs with Exit 114 and Midland Avenue improvements between Exit 114 and 8th Street.

Cost Comparisons

Option (costs in	At-Grade	Elevated	Cut-and-Cover
millions)		Structure	tunnel
Roadway construction	1.9	0.5	0.6
Bridge	2.9	2.9	2.9
Viaduct		35.5	
Tunnel			20
ROW Acquisition	1.4	1.4	1.4
23 rd and Grand Intersection	2	2	2
Retaining walls	3	2.4	2.4
Realignment of rail	3.5	2	2
Displaced homes	6	4.5	3.6
Exit 114 Interchange	12	12	12
Roadway Construction- Midland Ave.	3.7	3.7	3.7
Total construction	36.4	66.9	50.6
30% contingency	10.92	20.07	15.18
Total cost in 1999	47.32	86.97	65.78
dollars			
Inflated to 2003	53	97.4	73.7
dollars			





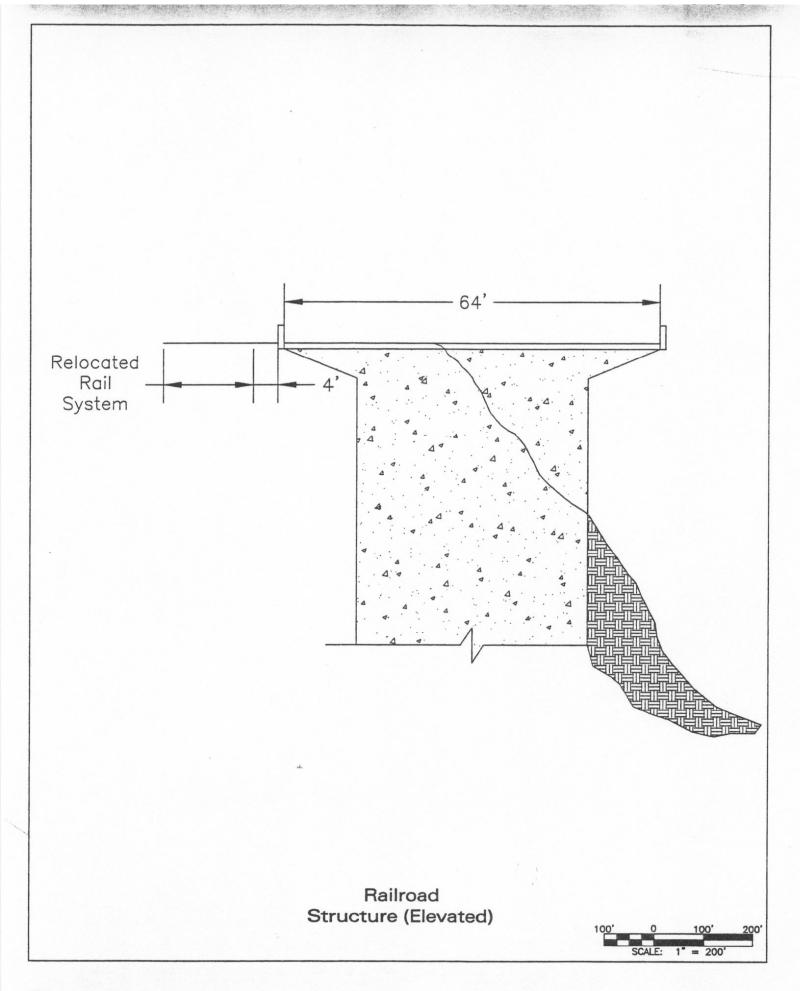
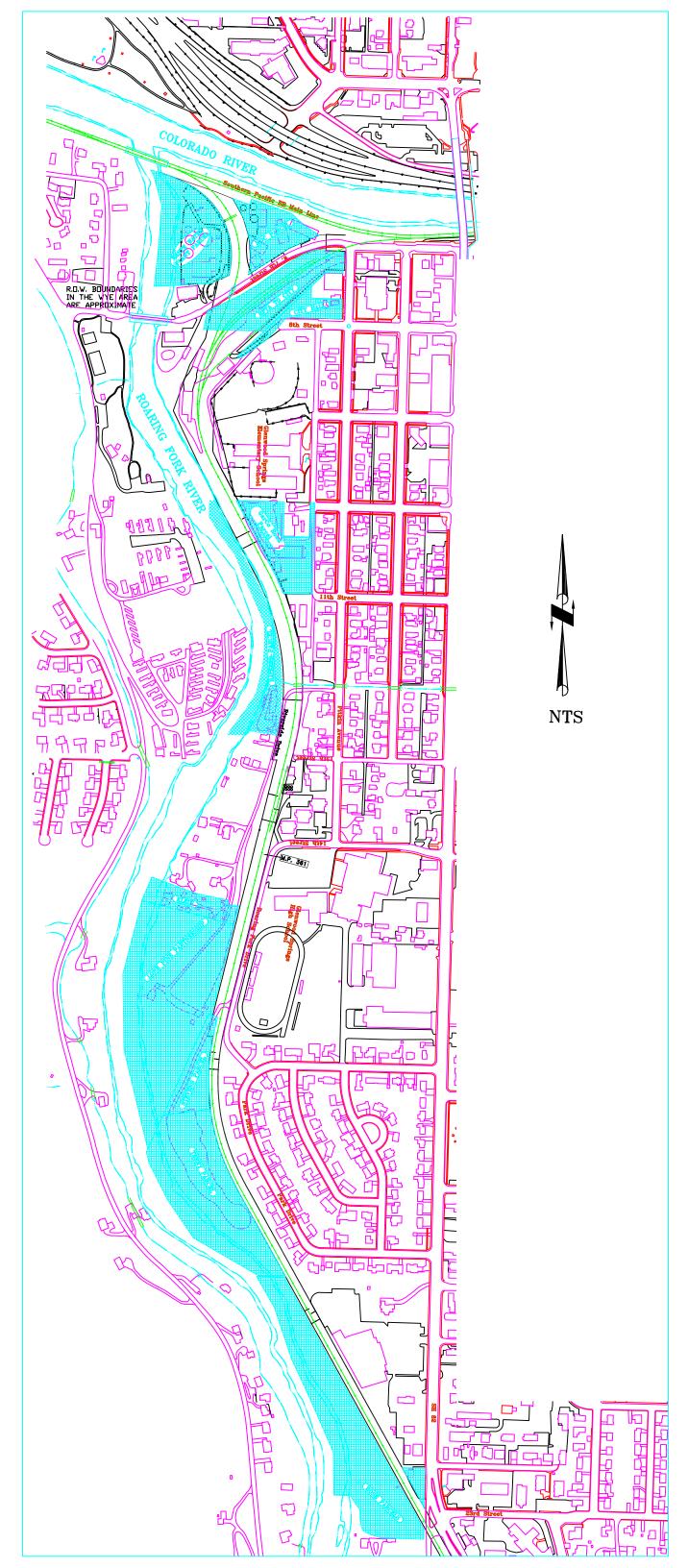


Figure A4
City Owned
lands along the
Rail Corridor



Appendix B: Figures 1-7

- a. Figure 1: City Street Map
- b. Figure 2: Functional Classification of Streets and Highways
- c. Figure 3: On Road Bicycle Route
- d. Figure 4: Long Range Vehicular Improvements
- e. Figure 5: Long Range Bicycle and Pedestrian Improvements
- f. Figure 6: On Road Bicycle Route Signing
- g. Figure 7: Long Range Transit Improvements

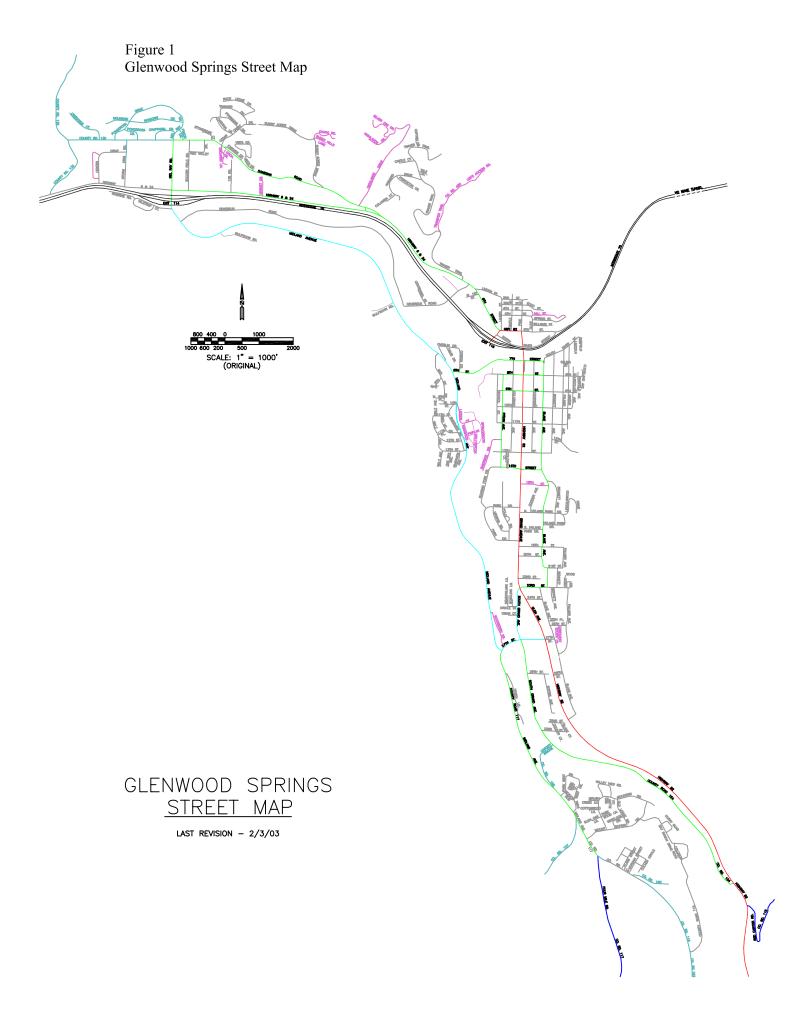


Figure 2 Glenwood Springs Major Street Classification

